

**REMARKS**

Upon entry of the present amendment, claims 1-11 are pending in the application, of which claims 1 and 5 are independent.

The above-identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present Amendment is submitted. It is contended that by the present amendment, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Applicant has made some minor changes to the specification in order to correct typographical errors.

In the above-identified Office Action, the Examiner rejected claims 1 and 2 under 35 USC 102(b) as being anticipated by Muramatsu et al. Muramatsu et al. disclose an active vibration damping system including a controller that applies a control pulse signal to a drive means within the system.

The Standard for Anticipation

In the case of *Motorola, Inc. v. Interdigital Technology Corp.*, 121 F. 3d 1461 (CAFC 1997), the Court of Appeals for the Federal Circuit stated:

**"For a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in the prior art (citation omitted). 'The (prior art) reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it' (citations omitted). Although this disclosure requirement presupposes the knowledge of one skilled in the art of the claimed invention, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not there."**

The above-quoted passage is consistent with many previous cases of the Federal Circuit and with MPEP 2131, which reiterate the rule that in order to anticipate a claim, a reference must teach every element of the claim.

Applicant respectfully submits that Muramatsu fails to disclose each and every element of applicant's claimed invention.

Regarding claim 1, the Examiner states that Muramatsu et al. disclose a method for controlling the drive of an actuator of an active vibration isolation system including an elastic body 16, a vibrating body 18, a liquid chamber 54, a moveable member 48, and an actuator 74, and (purportedly) describes the method step of controlling the current supplied to the actuator such that the current passing through the actuator becomes zero at least when the movable member has moved back (col. 16, line 65 – col. 17, line 17).

The applicant respectfully disagrees with this rejection. Muramatsu et al. disclose controllers to control an oscillating force for oscillating the oscillating plate 48. A first controller 80 generates a coil drive pulse signal E based on data it receives and reference data it has stored. For example, controller 80 receives multiple inputs including a reference signal R from an ignition pulse sensor or crank angle sensor, and then generates a pulse signal P having the same frequency of R and a duty ratio of 0.5. Controller 80 also determines the phase change for P dependent on the running condition of the vehicle, as known from input running condition signal S (col 16, line 21 – col 17 line 63). A second controller 82 adjusts the amplitude of pulse signal P based on the running condition of the vehicle resulting in coil drive pulse signal E.

In other words, the controllers of Muramatsu et al provide a coil drive pulse signal E that is *dependent upon the characteristics of the vibration to be damped* as represented in reference signal R. Reference signal R is based on sensor input from the ignition pulse sensor or crank angle sensor, and is therefore *unrelated to the position of the movable member within the damping*

*system*. Modifications of reference signal R by the controllers 80, 82 are also dependent upon characteristics of the running of the vehicle.

Because Muramatsu et al. base control of their actuator on the characteristics of the vibration to be damped, control of their actuator *is not* dependent upon the position of the movable member, as recited in the applicant's claim 1.

Applicant's claim 1 defines that in controlling operation of an actuator that is associated with a movable member that moves out and back in an operational cycle to change the capacity of a liquid chamber, the current supplied to the actuator is controlled such that the current passing through the actuator becomes zero at least when the movable member has moved back.

Muramatsu et al. do not teach, disclose or suggest the inventive idea of controlling the current supply to an actuator in compliance with the movement of a movable member. It is unclear to the applicant how the text cited by the Examiner at col 16 line 65 to col 17, line 17, directed to amplitude modulation of the control pulse signal P, is related to the claim as recited. The teachings of Muramatsu are consistent with the prior art illustrated in applicant's Figure 6, and discussed by applicant in paragraphs 4 and 5 of the present application.

Thus, the applicant respectfully asserts that Muramatsu et al do not disclose the recited features of claim 1, and claim 1 is considered to be in condition for allowance.

Muramatsu not only fails to anticipate applicant's claimed invention, but is so different from applicant's invention that the claims distinguish over the teaching of the reference. Applicant therefore requests reconsideration and withdrawal of the rejection of claims 1-2.

Regarding claim 2, the Examiner states that Muramatsu et al disclose setting a large number of consecutive micro time regions within a cycle, and carrying out duty control of the voltage that is

applied to the actuator in each of the time regions.

The applicant respectfully disagrees with this rejection. In our review of this reference, we find that Muramatsu et al. discloses a controller that carries out duty control. However, this duty control is unrelated to the cycle of movement of the actuator. Muramatsu disclose duty control within a cycle of vibration of the engine. Muramatsu et al do not disclose setting a large number of consecutive micro time regions within *a cycle of the lift of the actuator*, and carrying out duty control of the voltage that is applied to the actuator in each of the time regions, as recited by the applicant in claim 2. This feature is key to the applicant's invention since use of the large number of consecutive time regions within a cycle allows the current to become zero at the end of the cycle, thus minimizing generation of heat within the coil.

Because Muramatsu et al do not disclose the features recited within claim 2, claim 2 is considered to be in condition for allowance.

New independent claims 5 and 11, and dependent claims 6-10 have been added to more clearly define the features of the invention, especially to clarify that the cycle claimed is the operation cycle of the actuator, and that the position of the actuator is determined using a sensor.

It is applicant's contention that no possible reading of the references, either singly or in any reasonable combination, can be viewed as teaching applicant's claimed invention.

For all of the above mentioned reasons, applicant requests reconsideration and withdrawal of the rejection of record, and allowance of the pending claims.

Applicant respectfully submits that all of the above amendments are fully supported by the original application. Applicant also respectfully submits that the above amendments do not introduce any new matter into the application.

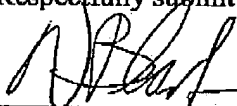
Applicant respectfully submits that the above amendments are fully supported by the original disclosure, including the drawings and claims, no new matter is introduced by the above amendments. The application is now believed to be in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner is not fully convinced of the allowability all of the claims now in the application, applicant respectfully requests that the Examiner telephonically contact applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable reconsideration is respectfully requested.

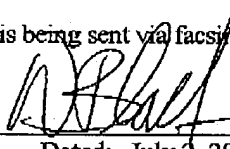
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July 2, 2004

Respectfully submitted,

  
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**CERTIFICATE OF TRANSMISSION**

I hereby certify that this correspondence is being sent via facsimile transmission to the US Patent & Trademark Office, Art Unit 3683, on July 2, 2004.

  
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Dated: July 2, 2004

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